IN THE CLAIMS

This listing of the claim will replace all prior versions and listings of claim in the present application.

Listing of Claims

1.   (previously presented) A disk array controller comprising:

a channel interface package in which at least a channel interface unit with a host computer and an access path interface unit are packaged;

a disk interface package in which at least a disk interface with a disk drive and an access path interface unit are packaged; and

a memory package in which a memory unit for storing control data for the disk drive and an access path interface unit are packaged,

wherein connections are made between the access path interface unit in the channel interface package and the access path interface unit in the memory package by first cables and between the access path interface unit in the disk interface package and the access path interface unit in the memory package by second cables different from said first cables.

2.   (previously presented) The disk array controller as defined in claim 1, further comprising:

a plurality of said memory packages; wherein connections are made between the access path interface unit in the channel interface package and the access path interface unit in each of the plural memory packages by first cables, and between the access path interface unit in the disk interface package and the access path

interface unit in each of the plural memory packages by second cables different from said first cables.

3.　　(previously presented) The disk array controller as defined in claim 2, wherein the plural memory packages are interconnected by third cables different from said first and second cables.

4.　　(previously presented) The disk array controller as defined in claim 2, wherein the memory units packaged in the plural memory packages store the same data.

5.　　(previously presented) The disk array controller as defined in claim 2, wherein power is supplied from different power supplies to respective memory package of the plural memory packages.

6.　　(currently amended) A disk array controller comprising:

a channel interface package in which at least a channel interface unit with a host computer and an access path interface unit are packaged;

a disk interface package in which at least a disk interface with a disk drive and an access path interface unit are packaged:

a memory package in which a memory unit for storing control data for the disk drive and an access path interface unit are packaged,

wherein connections are made between the access path interface unit in the

channel interface package and the access path interface unit in the memory package and between the access path interface unit in the disk interface package and the access path interface unit in the memory package by cables; and

a platter,

wherein the channel interface package and the disk interface package are mounted on the platter,

wherein a first path and a second pathpart are printed on the platter,

wherein the first path couples the channel interface package to the cables, and

wherein the second path couples the disk interface package to the cable.

7.   (previously presented) A disk array controller comprising:

a channel interface package in which at least a channel interface unit with a host computer and an access path interface unit are packaged;

a disk interface package in which at least a disk interface with a disk drive and an access path interface unit are packaged:

a memory package in which a memory unit for storing control data for the disk drive and an access path interface unit are packaged,

wherein connections are made between the access !lath interface unit in the channel interface package and the access path interface unit in the memory package and between the access path interface unit in the disk interface package and the access path interface unit in the memory package by cables;

first and a second platters;

a first cable coupling the channel interface package and the memory packages; and

a second cable coupling the disk interface package and the memory package,

wherein the channel interface package is mounted on the first platter, and the disk interface package is mounted on the second platter,

wherein a path coupling the channel interface package to the cable is printed on the first platter, and

wherein a path coupling the disk interface package and the cable is printed on the second platter.

8.   (previously presented)A disk array controller, comprising:

an interface package in which at least a channel interface unit with a host computer and an access path interface unit are packaged;

a disk interface package in which at least a disk interface with a disk drive and an access path interface unit are packaged; and

a cache memory package in which a cache memory unit for temporarily storing data to be recorded into the disk drive and an access path interface unit are packaged,

wherein connections are made between the access path interface unit in the channel interface package and the access path interface unit in the cache memory package by first cables and between the access path interface unit in the disk interface package and the access path interface unit in the cache memory package by second cables different from said first cables.

9.   (previously presented) The disk array controller as defined in claim 8, further comprising:

a plurality of said cache memory packages,

wherein connections are made between the access path interface unit in the channel interface package and the access path interface unit in each of the plural cache memory packages by first cables and between the access path interface unit in the disk interface package and the access path interface unit in each of the plural memory packages by second cables different from said first cables.

10.   (previously presented) The disk array controller as defined in claim 9, wherein the plural cache memory packages are interconnected by third cables different from said first and second cables.

11.   (previously presented) The disk array controller as defined in claim 9, wherein the cache memory units mounted in the plural cache memory packages store the same data.

12.   (previously presented) The disk array controller as defined in claim 9, wherein power is supplied from different power supplies to respective cache memory package of the plural cache memory packages.

13.   (previously presented)A disk array controller, comprising:

a channel interface unit to be connected with a host computer;

a disk interface unit to be connected with a disk drive;

a memory interface unit for storing control data for the disk drive;

an interface platter on which the channel interface unit and the disk interface unit are mounted;

a memory platter on which the memory unit is mounted;

plural cables which couple the interface platter and the memory platter; and

a selector unit, coupled with the channel interface unit, the disk interface unit and the memory unit, which selects requests from the channel interface unit and the disk interface unit,

wherein a path coupling the channel interface unit to a first cable is printed on the interface platter,

wherein a path coupling the disk interface unit to a second cable different from said first cable is printed on the interface platter, and

wherein a path coupling the memory unit to a third cable different from said first and second cables is printed on the memory platter.

14. (currently amended)The disk array controller as defined in claim 13, wherein the selector unit is mounted on the interface platter, and

wherein a path coupling the selector unit is ~~mounted~~ printed the interface platter.

15. (previously presented) The disk array controller as defined in claim 14, wherein the selector unit and the memory unit are coupled.

16.   (previously presented)   The disk array controller as defined in claim 13, wherein the selector unit is mounted on the reverse of the interface platter's surface on which the channel interface unit and the disk interface unit are mounted.

17.   (canceled).

18.   (previously presented)A disk array controller, comprising:

a channel interface unit to be coupled with a host computer;

a disk interface unit to be coupled with a disk drive;

a cache memory unit for storing data to be recorded into the disk drive;

an interface platter on which the channel interface unit and the disk interface unit are mounted;

a memory platter on which the cache memory unit is mounted;

plural cables which couple the interface platter and the memory platter; and

a selector unit, coupled with the channel interface unit, the disk interface unit and the cache memory unit, which selects requests from the channel interface unit and the disk interface unit,

wherein a path coupling the channel interface unit to a first cable is printed I on the interface platter,

wherein a path coupling the disk interface unit to a second cable different from said first cable is printed on the interface platter, and

wherein a path coupling the cache memory unit to a third cable different said

first and second cables is printed on the memory platter.

19.   (previously presented)   The disk array controller as defined in claim 18, wherein the selector unit is mounted on the interface platter, and wherein a path coupling the selector to the cable is printed on the interface platter.

20.   (previously presented) The disk array controller as defined in claim 19, wherein the selector unit and the cache memory unit are coupled.

21.   (previously presented)   The disk array controller as defined in claim 19, wherein the selector unit is mounted on the reverse of the interface platter's surface on which the channel interface unit and the disk interface unit are mounted.

22.   (previously presented)A disk array controller, comprising:

plural channel interface units each of which is coupled with a host computer;

plural disk interface units each of which is coupled with a disk drive;

plural platters on each of which the channel interface unit, the disk interface unit and a memory unit are mounted; and

plural cables which couple the plural platters,

wherein a path coupling the channel interface unit to a first cable is printed on each of the plural platters,

wherein a path coupling the disk interface unit to a second cable different from said first cable is printed on each of the plural platters, and

wherein a path coupling the memory unit to a third cable different said first and second cables is printed on each of the plural platters.

23. (previously presented) The disk array controller as defined in claim 22, wherein the cable couples the channel interface unit or the disk interface unit on one of the plural platters, with the memory unit on another one of the plural platters.

24. (previously presented) The disk array controller as defined in claim 22, further comprising:

a selector unit, coupled with the channel interface unit, the disk interface unit and the memory unit which are mounted on one of the plural platters,

wherein said selector unit selects requests from the channel interface unit and the disk interface unit.

25. (previously presented) The disk array controller as defined in claim 24, wherein the selector unit is mounted on said one of the plural platters, and wherein a path coupling the selector unit to the cable is printed on the platter.

26. (previously presented) The disk array controller as defined in claim 24, wherein the selector unit is coupled with the channel interface unit and the disk interface unit which are mounted on another one of the plural platters.

27. (currently amended)A disk array controller, comprising:

plural channel interface units each of which is coupled with a host computer;

plural disk interface units each of which is coupled with a disk drive;

plural cache memory units for storing data to be recorded into the disk drive;

plural platters on each of which the channel interface unit, the disk interface unit and the cache memory unit are mounted;

plural cables which couple the plural platters; and

a selector unit, coupled with the channel interface unit, the disk interface unit and the cache memory unit which are mounted on a first platter of the plural platters,

wherein said selector unit selects requests from the channel interface unit and the disk interface unit,

wherein a path coupling the ~~disk~~ channel interface unit to a first cable is printed on each of the plural platters,

wherein a path coupling the disk interface unit to a second cable different from said first cable is printed on each of the plural platters, and

wherein a path coupling the cache memory unit to a third cable different from said first and second cables is printed on each of the plural platters.

28.   (previously presented) The disk array controller as defined in claim 27, wherein the selector unit is mounted on a second platter of the plural platters.

29.   (previously presented)   The disk array controller as defined in claim 27, wherein the selector unit is coupled with the channel interface unit and the disk interface unit which are mounted on a third platter of the plural platters.

30.   (previously presented)A disk array controller, comprising:

a channel interface unit to be coupled with a host computer;

a disk interface unit to be coupled with a disk drive;

a memory unit for storing control data for the disk drive;

a first platter on which the channel interface unit is mounted;

a second platter on which the disk interface unit is mounted;

a third platter on which the memory unit is mounted;

a first cable which couples the first and third platters; and

a second cable different from said first cable which couples the second and third platters,

wherein a path coupling the channel interface unit to the first cable is printed on the first platter,

wherein a path coupling the memory unit to the first cable is printed on the third platter, and

wherein a path coupling the memory unit to the second cable is printed on the third platter.

31.   (previously presented)   A disk array controller comprising:

a channel interface unit to be coupled with a host computer;

a disk interface unit to be coupled with a disk drive;

a memory unit for storing control data for the disk drive;

a first platter on which the channel interface unit is mounted;

a second platter on which the disk interface unit is mounted;

a third platter on which the memory unit is mounted;

a first cable which couples the first and third platters:

a second cable which couples the second and third platters,

wherein a path coupling the channel interface unit to the first cable is printed on the first platter,

wherein a path coupling the memory unit to the first cable is printed on the third platter,

wherein a path coupling the memory unit to the second cable is printed on the third platter;

a cache memory unit for storing data to be recorded into the disk drive;

a fourth platter on which the cache memory unit is mounted;

a third cable which couples the first and fourth platters; and

a fourth cable which couples the second and fourth platters,

wherein a path coupling the cache memory unit to the third cable is printed on the fourth platter, and

wherein a path coupling the cache memory unit to the fourth cable is printed on the fourth platter.

Claims 32-35 (canceled).

36. (previously presented) A disk array controller, comprising:

a channel interface unit to be coupled with a host computer;

a disk interface unit to be coupled with a disk drive;

a memory unit for storing control data for the disk drive;

an interface platter on which the channel interface unit and the disk interface unit are mounted; and

a memory platter on which the memory unit is mounted;

plural cables which couple the interface platter and the memory platter,

wherein a path coupling the channel interface unit to a first cable is printed I on the interface platter,

wherein a path coupling the disk interface unit to a second cable different from said first cable is printed on the interface platter;

wherein a path coupling the memory unit to a third cable different from said first and second cables is printed on the memory platter, and

wherein the interface platter is perpendicular to the memory platter.

37.   (previously   presented)A   disk   array   controller,   comprising: plural channel interface units each of which is coupled with a host computer;

plural disk interface units each of which is coupled with a disk drive;

a memory unit for storing control data for the disk drive;

plural interface platters on each of which the channel interface unit and the disk interface unit are mounted; and

a memory platter on which the memory unit is mounted;

plural cables each of which couples each of the plural interface platters and the memory platter,

wherein a path coupling the channel interface unit to a first cable is printed on

14

each of the plural interface platters,

wherein a path coupling the disk interface unit to a second cable different from said first cable is printed on each of the plural interface platters,

wherein a path coupling the memory unit to a third cable different from said first and second cables is printed on the memory platter, and

wherein the memory platter is located between the plural interface platters.

38.   (previously presented)A disk array controller, comprising:

plural channel interface units each of which is coupled with a host computer;

plural disk interface units each of which is coupled with a disk drive;

plural memory units for storing control data for the disk drive;

plural platters on each of which the channel interface unit, the disk interface unit and the memory unit are mounted;

plural cables which couple each of the plural platters,

wherein a path coupling the channel interface unit to a first cable is printed on each of the platters,

wherein a path coupling the disk interface unit to a second cable different from said first cable is printed on each of the platters,

wherein a path coupling the memory unit to a third cable different from said first and second cables is printed on each of the platters, and

wherein the first platter of the plural platters is located above the second platter of the plural platters.

39.   (previously presented)   The disk array controller as defined in claim 38, wherein said first platter and said second platter are vertical.

Claim 40 (canceled).

41.   (previously presented) A disk array controller, comprising:

a channel interface unit to be coupled with a host computer;

a disk interface unit to be coupled with a disk drive;

a cache memory unit for storing data to be recorded into the disk drive;

an interface platter on which the channel interface unit and the disk interface unit are mounted; and

a memory platter on which the cache memory unit is mounted;

plural cables which couple the interface platter and the memory platter,

wherein a path coupling the channel interface unit to a first cable is printed on the interface platter,

wherein a path coupling the disk interface unit to a second cable different from said first cable is printed on the interface platter,

wherein a path coupling the memory unit to a third cable different from said first and second cables is printed on the memory platter, and

wherein the interface platter is perpendicular to the memory platter.

42.   (previously presented)A disk array controller, comprising:

plural channel interface unit each of which is coupled with a host computer;

plural disk interface unit each of which is coupled with a disk drive;

a cache memory unit for storing data to be recorded into the disk drive;

plural interface platters on each of which the channel interface unit and the disk interface unit are mounted; and

a memory platter on which the cache memory unit is mounted;

plural cables each of which couples each of the plural interface platters to the memory platter,

wherein a path coupling the channel interface unit to a first cable is printed on the interface platter,

wherein a path coupling the disk interface unit to a second cable different from said first cable is printed on the interface platter,

wherein a path coupling the cache memory unit to a third cable different from said first and second cables is printed on the memory platter, and

wherein the memory platter is located between the plural interface platters.